

Title (en)

MATCHING NETWORKS FOR WIRELESS POWER TRANSFER AND RELATED TECHNIQUES

Title (de)

ANPASSUNGSNETZWERKE FÜR DIE DRAHTLOSE ENERGIEÜBERTRAGUNG UND VERWANDTE TECHNIKEN

Title (fr)

RÉSEAUX D'ADAPTATION POUR TRANSFERT DE PUISSANCE SANS FIL ET TECHNIQUES ASSOCIÉES

Publication

EP 3476043 A4 20200722 (EN)

Application

EP 17821027 A 20170626

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- US 201762450495 P 20170125
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Abstract (en)

[origin: US2017373662A1] Multistage matching networks and analytical frameworks for improving and/or optimizing the networks is provided. In one example, a framework relaxes the resistive constraint on the input and load impedances of the stages of a multistage matching network and allows them to be complex. Based on this framework, the design of multistage matching networks can be improved or optimized, such as using a method of Lagrange multipliers. A design optimization approach, for example, can be used to predict an optimum distribution of gains and impedance characteristics among the stages of a multistage matching network. The efficiency of matching networks designed using this example approach is compared with a conventional design approach, and it is shown that significant efficiency improvements are possible.

IPC 8 full level

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Citation (search report)

- [X] US 2011163935 A1 20110707 - DE JONGH MAURICE [NL], et al
- [X] US 2013249650 A1 20130926 - BIANCHI GIOVANNI [DE]
- [X] US 5699071 A 19971216 - URAKAMI KANTA [JP], et al
- [X] US 2013343106 A1 20131226 - PERREAULT DAVID J [US], et al
- See also references of WO 2018005383A1

Designated contracting state (EPC)

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US 10250216 B2 20190402; **US 2017373662 A1 20171228**; EP 3476043 A1 20190501; EP 3476043 A4 20200722; EP 3476044 A1 20190501; EP 3476044 A4 20200226; US 10333485 B2 20190625; US 2017373660 A1 20171228; WO 2018005371 A1 20180104; WO 2018005383 A1 20180104

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